

Docket No.: 20239/0204681-US0  
(PATENT)**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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In re Patent Application of:  
Kazuhiro Hirose et al.Application No.: National Phase of  
PCT/JP2005/005887

Confirmation No.: N/A

Filed: Concurrently Herewith

Art Unit: N/A

For: SOFT MAGNETIC MATERIAL AND  
POWDER MAGNETIC CORE (as amended)

Examiner: Not Yet Assigned

**INFORMATION DISCLOSURE STATEMENT (IDS)**Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

This Information Disclosure Statement is submitted in accordance with 37 C.F.R. 1.97, 1.98, and it is requested that the information set forth in this statement and in the listed documents be considered during the pendency of the above-identified application, and any other application relying on the filing date of the above-identified application or cross-referencing it as a related application.

1. This IDS should be considered, in accordance with 37 C.F.R. 1.97, as it is filed:  
(Check one of the boxes A-D)

- A. within three months of the filing date of the above-identified national application or within three months of the entry into the national stage of the above identified national application
- B. before the mailing date of a first office action on the merits, or a first office action after filing a request for continued examination.
- C. after (A) and (B) above, but before final rejection or allowance, and Applicants have made the necessary statement in box "i" below or paid the necessary fee in box "ii" below.

(check one of the boxes "i" and "ii" below:)

- i. Counsel states that, upon information and belief, each item of information listed herein was (check one of boxes (a) or (b))
  - (a) first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS; or
  - (b) not cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of undersigned after making reasonable inquiry, was not known to any individual designated in 1.56(c) more than three months prior to the filing of this IDS.
- ii. A check for the fee set forth in 1. 17(p), presently believed to be \$180, is enclosed.
- D. after (A), (B) and (C) above, but before payment of the issue fee: Applicant petitions under 37 C.F.R. 1.97(d) for the consideration of this IDS. Under 37 CFR 1.17(i) a check in the amount of \$180.00 is enclosed. Counsel certifies that, upon information and belief, each item of information listed herein was

(check one of the boxes "a" and "b" below:)

- (a) first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS; or
- (b) was not cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of undersigned after making reasonable inquiry, was not known to any individual designated in 1.56(c) more than three months prior to the filing of this IDS.

2. In accordance with 37 C.F.R. 1.98, this IDS includes a list (e.g., form PTO/SB/08) of all patents, publications, or other information submitted for consideration by the office, either incorporated into this IDS or as an attachment hereto. A copy of each document listed is attached, except as explained below.

(check boxes A, B and/or C and fill in blanks, if appropriate.)

- A. Pursuant to the Notice issued by the United States Patent and Trademark Office dated July 11, 2003 waiving the requirements of 37 C.F.R. § 1.98(a)(2)(i), a copy/copies of the United States Patent on PTO/SB08 is/are not being submitted.
- B. Document(s) \_\_\_\_\_ is (are) deemed substantially cumulative to document(s) \_\_\_\_\_, and, in accordance with 1.98(c), only a copy of each of the latter documents is enclosed.
- C. Certain documents were previously cited by or submitted to the Office in the following prior applications, which are relied upon under 35 U.S.C. 120:

<<INSERT SERIAL NO. & FILING DATE>>

Applicant identifies these documents by attaching hereto copies of the forms PTO-892, PTO-1449 and/or PTO/SB/08 from the files of the prior application(s) or a fresh PTO/SB/08 listing these documents, and request that they be considered and made of record in accordance with 1.98(d). Per 37 CFR 1.98(d), copies of these documents need not be filed in this application.

3. Cite No(s). BA - BI and BK - BN are not in the English language. In accordance with 1.98(c), Applicant states:
- An English translation of each document (or of the pertinent portions thereof), or a copy of each corresponding English-language patent or application, or English-language abstract (or claim) is enclosed.
- The requirement for a concise explanation of the relevance of any foreign language document is satisfied by the attached search report; citation of the documents cited in the search report shall not be construed as an admission that they are or are considered to be, material to patentability of the subject matter claimed herein (See MPEP §609).
- A concise explanation of the relevance of document(s) \_\_\_\_\_ is set forth as follows: [Insert concise explanation of relevance]
- A concise explanation of the relevance of document(s) \_\_\_\_\_ can be found on page(s) \_\_\_\_\_ of the specification.
- A concise explanation of document(s) \_\_\_\_\_ can be found on the attached sheet.

4. No explanation of relevance is necessary for documents in the English language (see reply to Comments 67 in the preamble to the final rules; 1135 OG 13 at 20).
5. Other information being provided for the examiner's consideration follows:

[An International Search Report, mailed June 28, 2005, which issued during the prosecution of International Application No. PCT/JP2005/005887 which corresponds to the present application.]

6. In accordance with 37 C.F.R. 1.97(g) and (h), the filing of this IDS should not be construed as a representation that a search has been made or that information cited is, or is considered to be, material to patentability as defined in §1.56 (b), or that any cited document listed or attached is (or constitutes) prior art. Unless other-wise indicated, the date of publication indicated for an item is taken from the face of the item and Applicant reserves the right to prove that the date of publication is in fact different.

Early and favorable consideration is earnestly solicited.

The Commissioner is authorized to charge any deficiency of up to \$300.00 or credit any excess in this fee to Deposit Account No. 04-0100.

Dated: September 18, 2006

Respectfully submitted,

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|                                 |   |    |   |                          |                       |
|---------------------------------|---|----|---|--------------------------|-----------------------|
| Substitute for form 1449A/B/PTO |   |    |   | <b>Complete if Known</b> |                       |
|                                 |   |    |   | Application Number       | Not Yet Assigned      |
|                                 |   |    |   | Filing Date              | Concurrently Herewith |
|                                 |   |    |   | First Named Inventor     | Kazuhiro Hirose       |
|                                 |   |    |   | Art Unit                 | N/A                   |
|                                 |   |    |   | Examiner Name            | Not Yet Assigned      |
| Sheet                           | 1 | of | 1 | Attorney Docket Number   | 20239/0204681-US0     |

| U.S. PATENT DOCUMENTS |                       |  |                  |   |   |
|-----------------------|-----------------------|--|------------------|---|---|
| Examiner Initials*    | Cite No. <sup>1</sup> | Document Number                          | Publication Date | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
|                       |                       | Number-Kind Code <sup>2</sup> (if known) | MM-DD-YYYY       |   |   |
| /M.H./AA*             | US-6,706,206          |  | 03-16-2004       | Aichele et al.                                  |   |
| /M.H./AB*             | US-6,280,683          |  | 08-28-2001       | Hendrickson et al.                              |   |

| FOREIGN PATENT DOCUMENTS |                       |   |                                |  |   |                |
|--------------------------|-----------------------|---|--------------------------------|--|---|----------------|
| Examiner Initials*       | Cite No. <sup>1</sup> | Foreign Patent Document   | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages<br>or Relevant Figures Appear | T <sup>4</sup> |
|                          |                       | Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known) |                                |  |   |                |
| /M.H./BA                 | JP-2005-133148-A      |   | 05-26-2005                     | MITSUBISHI MATERIALS CORP                          | Abstract Attached   | ✓              |
| /M.H./BB                 | JP-2003-510460-A      |   | 03-18-2003                     | ROBERT BOSCH GMBH                                  | Corresponds to Citation No. AA  | ✓              |
| /M.H./BC                 | JP-2001-358005-A      |   | 12-26-2001                     | DAIDO STEEL CO LTD                                 | Abstract Attached   | ✓              |
| /M.H./BD                 | JP-07-245209-A        |   | 09-19-1995                     | TDK CORP   | Abstract Attached   | ✓              |
| /M.H./BE                 | JP-2003-526693-A      |   | 09-09-2003                     | HOEGANAES CORPORATION                              | Corresponds to Citation No. AB  | ✓              |
| /M.H./BF                 | JP-2002-217015-A      |   | 08-02-2002                     | KAWASAKI STEEL CORP                                | Abstract Attached   | ✓              |
| /M.H./BG                 | JP-08-100203-A        |   | 04-16-1996                     | QUEBEC METAL POWDERS LTD                           | Abstract Attached   | ✓              |
| /M.H./BH                 | JP-09-104902-A        |   | 04-22-1997                     | SHIN ETSU CHEM CO LTD                              | Abstract Attached   | ✓              |
| /M.H./BI                 | JP-6-507928-A         |   | 09-08-1994                     | HOEGANAES CORPORATION                              | Corresponds to Citation No. BJ  | ✓              |
| /M.H./BJ                 | WO-92/20522-A1        |   | 11-26-1992                     | HOEGANAES CORPORATION                              |   |                |
| /M.H./BK                 | JP-07-254522-A        |   | 10-03-1995                     | TDK CORP   | Abstract Attached   | ✓              |
| /M.H./BL                 | JP-08-037107-A        |   | 02-06-1996                     | TDK CORP   | Abstract Attached   | ✓              |
| /M.H./BM                 | JP-2000-003810-A      |   | 01-07-2000                     | TOKIN CORP   | Abstract Attached   | ✓              |
| /M.H./BN                 | JP-2000-030924-A      |   | 01-28-2000                     | DAIDO STEEL CO LTD                                 | Abstract Attached   | ✓              |

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \* CITE NO.: Those application(s) which are marked with an single asterisk (\*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(ii)) because that application was filed after June 30, 2003 or is available in the IFW. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that Issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

| NON PATENT LITERATURE DOCUMENTS |                       |   |  |  |  |  |                |
|---------------------------------|-----------------------|---|--|--|--|--|----------------|
| Examiner Initials               | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. |  |  |  |  | T <sup>2</sup> |
|                                 |                       |   |  |  |  |  |                |
|                                 |                       |   |  |  |  |  |                |

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

|                    |                 |                 |            |
|--------------------|-----------------|-----------------|------------|
| Examiner Signature | /Matthew Hoban/ | Date Considered | 09/16/2008 |
|--------------------|-----------------|-----------------|------------|

## A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl<sup>7</sup> H01F/24, B22F1/02, 3/00, H01F1/33, 27/255, 41/02

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl<sup>7</sup> H01F/24, B22F1/02, 3/00, H01F1/33, 27/255, 41/02

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

|                           |           |                            |           |
|---------------------------|-----------|----------------------------|-----------|
| Jitsuyo Shinan Koho       | 1922-1996 | Jitsuyo Shinan Toroku Koho | 1996-2005 |
| Kokai Jitsuyo Shinan Koho | 1971-2005 | Toroku Jitsuyo Shinan Koho | 1994-2005 |

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No. |
|-----------|--|-----------------------|
| E, X      | JP 2005-133148 A (Mitsubishi Materials Corp.), 26 May, 2005 (26.05.05), Claims; Par. Nos. [0001], [0004]; table 2 (Family: none)   | 1, 2, 4-7             |
| E, Y      |  | 3                     |
| X         | JP 2003-510460 A (Robert Bosch GmbH), 18 March, 2003 (18.03.03), Claims 1, 2, 10; Par. Nos. [0019] to [0023] & US 6706206 B1 & EP 1131831 A & WO 2001/022448 A1 & DE 19945619 A & CN 1322366 T | 1, 2, 6               |
| Y         | JP 2001-358005 A (Daido Steel Co., Ltd.), 26 December, 2001 (26.12.01), Par. No. [0021] (Family: none)   | 3-5, 7                |
| Y         |  |                       |
|           |  |                       |

 Further documents are listed in the continuation of Box C. See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance.

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&amp;" document member of the same patent family

Date of the actual completion of the international search

15 June, 2005 (15.06.05)

Date of mailing of the international search report

28 June, 2005 (28.06.05)

Name and mailing address of the ISA/  
Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.

## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No. |
|-----------|--|-----------------------|
| Y         | JP 7-245209 A (TDK Corp.),<br>19 September, 1995 (19.09.95),<br>Par. No. [0026]; table 1<br>(Family: none)   | 3,7                   |
| Y         | JP 2003-526693 A (Hoeganaes Corp.),<br>09 September, 2003 (09.09.03),<br>Par. Nos. [0041], [0042]<br>& US 6280683 B1 & US 2002/4540 A1<br>& EP 1023383 A & EP 1230052 A<br>& WO 1999/020689 A1 & WO 2001/030521 A1 | 3-5                   |
| Y         | JP 2002-217015 A (Kawasaki Steel Corp.),<br>02 August, 2002 (02.08.02),<br>Par. Nos. [0013], [0016]<br>(Family: none)  | 4,5                   |